

Climate Action Revenue Incentive (CARIP) Public Report for 2018



Local Government: City of Merritt

Report Submitted by:

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The City of Merritt has completed the 2018 Climate Action Revenue Incentive Program (CARIP) Public Report as required by the Province of BC. The CARIP report summarizes actions taken in 2018 and proposed for 2019 to reduce corporate and community-wide energy consumption and greenhouse gas emissions (GHG) and reports on progress towards achieving carbon neutrality.

2018 BROAD PLANNING ACTIONS

Broad Planning refers to high level planning that sets the stage for GHG emissions reductions, including plans such as Official Community Plans, Integrated Community Sustainability Plans, Climate Action Plans or Community Energy Emissions Plans. Land use planning that focuses on Smart Growth principles (compact, complete, connected, and centred) plays an especially important role in energy and GHG reduction.

Q	Q 6 + Q 7 Community-Wide Broad Planning Actions Taken in 2018 + Additional Actions		
	Requirement of low flow plumbing fixtures and water meters in new construction		
	Expanded Transit Service		
	Promotion of water conservation through restrictions and education		
	Encouraging compact community design, by providing revitalization exemption for increased		
	density and new construction/renos in the downtown core		
QE	3 Community-Wide Broad Planning Actions Proposed for 2019		
	Looking at a bike network plan for the community for commuting purposes		
	Continuing to upgrade walking trails to make them suitable for multi use pathways		

QS	Q 9 + Q 10 Corporate Broad Planning Actions Taken in 2018 + Additional Actions		
	Included impact on green house gas emissions in budgeting proposals for 2019		
Q 1	Q 11 Corporate Broad Planning Actions Proposed for 2019		
	Bringing forward the City's GHG emissions in Council orientation and strategic planning		
	Review of City's OCP, including GHG reduction policies		

Broad Planning	
Q 12 What is (are) your current	(Please provide details here)
GHG reduction target(s)?	10% by 2020



Q 13 Are you familiar with your local government's community energy and emissions inventory (e.g. <u>CEEI</u> or another inventory)?	Yes
Q 14 What plans, policies or guidelines govern the implementation of climate mitigation in your community?	
Community Energy and Emissions Plan	Yes
Official Community Plan	Yes
Regional Growth Strategy	Yes
Q 15 Does your local government have a corporate GHG reduction plan?	No

2018 BUILDING AND LIGHTING ACTIONS

Building and Lighting Actions

Low-carbon buildings use the minimum amount of energy needed to provide comfort and safety for their inhabitants and tap into renewable energy sources for heating, cooling and power. These buildings can save money, especially when calculated over the long term. This category also includes reductions realized from energy efficient street lights and lights in parks or other public spaces.

Q 16	Q 16 + Q 17 Community-Wide Building and Lighting Actions Taken in 2018 + Additional Actions		
E	ncouraged increased density through zoning and revitalization tax exemptions		
Q 18	Community-Wide Building and Lighting Actions Proposed for 2019		
C	Continuing education and enforcement of water conservation through meters and low flow fixtures		
R	Redoing Subdivision Servicing bylaw, and looking at changing street lighting requirements		

Q 1	Q 19 + Q 20 Corporate Building and Lighting Actions Taken in 2018 + Additional Actions		
	Replacement of street lights with LED when changing or adding lights		
	Replacement of HVAC unit at Civic Centre to new more efficient one		
	Upgrades at the Arena to ice plant to increase efficiency		
Q 2	Q 21 Corporate Building and Lighting Actions Proposed for 2019		
	Conversion of existing lights at the Arena and other City facilities to more efficient LED's.		



Building and Lighting	
The Province has committed to taking incremental steps to increase energy-efficiency r	requirements in
the BC Building Code to make buildings net-zero energy ready by 2032. The BC Energy S	Step Codea part
of the BC Building Codesupports that effort	
Q 22 Is your local government aware of the <u>BC Energy Step Code</u> ?	Yes
Q 23 Is your local government implementing the BC Energy Step Code?	No

P5 2018 ENERGY GENERATION ACTIONS

Energy Generation Actions

A transition to renewable or low-emission energy sources for heating, cooling and power supports large, long-term GHG emissions reductions. Renewable energy including waste heat recovery (e.g. from biogas and biomass), geo-exchange, micro hydroelectric, solar thermal and solar photovoltaic, heat pumps, tidal, wave, and wind energy can be implemented at different scales, e.g. in individual homes, or integrated across neighbourhoods through district energy or co-generation systems.

Q 2	24 + Q 25 Community-Wide Energy Generation Actions Taken in 2018 + Additional Actions
Q 2	26 Community-Wide Energy Generation Actions Proposed for 2019
Q 2	27 + Q 28 Corporate Energy Generation Actions Taken in 2018 + Additional Actions
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Q 2	29 Corporate Energy Generation Actions Proposed for 2019

Energy Generation	
Q 30 Is your local government developing, or constructing a	
district energy system	No
renewable energy system	No
none of the above	
Q 31 Is your local government operating a	
district energy system	No
renewable energy system	No
none of the above	
Q 32 Is your local government connected to a district energy system that is operated by another	No
energy provider?	
Q 33 Are you familiar with the 2018 List of Funding Opportunities for Clean Energy Projects Led	Yes
by First Nations and Local Governments?	

2018 GREENSPACE/NATURAL RESOURCE PROTECTION ACTIONS

Greenspace Actions

Greenspace/Natural Resource Protection refers to the creation of parks and greenways, boulevards, community forests, urban agriculture, riparian areas, gardens, recreation/school sites, and other green spaces, such as remediated brownfield/contaminated sites as well as the protection of wetlands, waterways and other naturally occurring features.

Q3	Q 34 + Q 36 Community-Wide Greenspace Actions Taken in 2018 + Additional Actions (Q 35 below Q 41)	
	The City receives either land or funding in lieu for parkland when new developments occur	
	Community Gardens are supported by the Community and Council	



Q 3	Q 37 Community-Wide Greenspace Actions Proposed for 2019	
	The City is working with both the Province and First Nations on water stewardship projects	

Q3	Q 38 + Q 39 Corporate Greenspace Actions Taken in 2018 + Additional Actions		
	The City maintains all greenspace and when possible obtains additional lands for trails and		
	Parks.		
Q 4	Q 40 Corporate Greenspace Actions Proposed for 2019		
	The City is working on developing flood mitigation plans that enhance and protect the existing waterways and wetlands.		
	,		

Greenspace	
Q 41 Does your local government have urban forest policies, plans or programs?	No
Q 35. Does your local government have policies, plans or programs to support local food production?	No
production.	

2018 SOLID WASTE ACTIONS

Solid Waste Actions

Reducing, reusing, recycling, recovering and managing the disposal of the residual solid waste minimizes environmental impacts and supports sustainable environmental management, greenhouse gas reductions, and improved air and water quality.

Q 4	Q 42 + Q 43 Community-Wide Solid Waste Actions Taken in 2018 + Additional Actions	
	Provided composters to the public at cost	
	Supported waste reduction policies and actions outlined in the Regional Solid Waste Management	
	Plan.	
	Provided tips on reducing solid waste through local media outlets and social media	



Q 4	Q 44 Community-Wide Solid Waste Actions Proposed for 2019	
	Continued support of the waste reduction policies and action in the Regional Sold Waste	
	Management Plan	
	Joining the RecycleBC network for recycling	

Q 4	Q 45 + Q 46 Corporate Solid Waste Actions Taken in 2018 + Additional Actions		
	Ongoing work on reducing paper consumption		
	Separation of recyclables at all City facilities		
Q 4	Q 47 Corporate Solid Waste Actions Proposed for 2019		
	Development of electronic records management and meeting planning software with the goal of		
	reducing paper consumption.		
	Ongoing education of staff on methods of reducing and/or eliminating waste generated through		
	operations.		

Solid Waste	
Q 48 Does your local government have construction and demolition waste reduction policies, plans or programs?	Yes
Q 49 Does your local government have organics reduction/diversion policies, plans or programs?	No

2018 TRANSPORTATION ACTIONS

Transportation Actions

Transportation actions that increase transportation system efficiency emphasize the movement of people and goods, and give priority to more efficient modes, e.g. walking, cycling and public transit, can contribute to reductions in GHG emissions and more livable communities.

Q	Q 50 + Q 51 Community-Wide Transportation Actions Taken in 2018 + Additional Actions	
	Expanded transit service in the region	
	Supported the development of alternatives to Greyhound for public transit to other communities	
	Promotion of Bike to Work Week	
	Operated and maintained electric vehicle chargers	



Q 5	Q 52 Community-Wide Transportation Actions Proposed for 2019	
	Continuing to look at ways that transit can be encouraged to limit the number of vehicles on the	
	road.	
	Ongoing support of electric vehicle chargers	
	Development of additional multi use pathways	

Q 5	Q 53 + Q 54 Corporate Transportation Actions Taken in 2018 + Additional Actions		
	Enforcement of anti idling policy for all City vehicles		
	Ongoing replacement of older fleet with newer more efficient models		
Q 55 Corporate Transportation - Actions Proposed for 2019			
	Ongoing enforcement of anti idling policy		
	Encouraging and promoting car pooling when possible for City business		

Transportation	
Q 56 Does your local government have policies, plans or programs to support:	
Walking	Yes
Cycling	Yes
Transit Use	Yes
Electric Vehicle Use	Yes
Other (please specify)	No
Q 57 Does your local government have a Transportation Demand Management (TDM)	
strategy (e.g. to reduce single-vehicle occupancy trips, increase travel options, provide	
incentives to encourage individuals to modify travel behaviour)?	
Q 58 Does your local government integrate its transportation and land use planning? Yes	

2018 WATER AND WASTEWATER ACTIONS

Water and Wastewater Actions

Managing and reducing water consumption and wastewater is an important aspect of developing a sustainable built environment that supports healthy communities, protects ecological integrity, and reduces GHG emissions.

Q 59 + Q 60 Community-Wide Water and Wastewater Actions Taken in 2018 + Additional Actions



	Promotion and education pertaining to drought resistant plantings	
	Enforcement of watering restrictions	
Q 6	Q 61 Community-Wide Water and Wastewater Actions Proposed for 2019	
	Working towards universal water metering program	
	Continued education pertaining to drought resistant landscaping	
	Enforcement of watering restrictions	
	Encouraging reduced water usage through social media	
	Ongoing work on storm drain masterplan for rainfall and run off	

Q6	Q 62 + Q 63 Corporate Water and Wastewater Actions Taken in 2018 + Additional Actions	
	Ongoing leak detection program	
	Being the leader in observing watering restrictions and reductions	
Q6	64 Corporate Water and Wastewater Actions Proposed for 2019	
	Commissioning of UV system for municipal water system	
	Ongoing leak detection program	

Water Conservation	
Q 65 Does your local government have water conservation policies, plans or programs?	Yes

2018 CLIMATE CHANGE ADAPTATION ACTIONS

This section of the CARIP survey is designed to collect information related to the types of climate impacts local governments are experiencing and how they are being addressed.

Q 66 Please identify the THREE climate impacts that are most relevant to your Local Government.

- Changes to temperature and precipitation causing seasonal drought
- Increased temperatures increasing wildfire activity
- Extreme weather events contributing to urban and overland flooding

Other (please specify):

Q 67 In 2018 has your local government addressed the impacts of a changing climate using any of the following?



Risk and Vulnerability Assessments	No	
Risk Reduction Strategies	No	
Emergency Response Planning	Yes	
Asset Management	Yes	
Natural/Eco Asset Management Strategies	No	
Infrastructure Upgrades (e.g. stormwater system upgrades)	Yes	
Beach Nourishment Projects	No	
Economic Diversification Initiatives	Yes	
Strategic and Financial Planning	Yes	
Cross-Department Working Groups	No	
Official Community Plan Policy Changes	No	
Changes to Zoning and other Bylaws and Regulations	No	
Incentives for Property Owners (e.g. reducing storm water run-off)	No	
Public Education and Awareness	Yes	
Research	Yes	
Mapping	No	
Partnerships	Yes	
Other (please specify):		

Please elaborate on key actions and/or partnerships your local government has engaged in to prepare for, and adapt to a changing climate. Add links to key documents and information where appropriate. Firesmart Community Information Sessions Developed prescriptions for fuel management Q 69 Climate Change Adaptation Actions Proposed for 2019 Use of goats to reduce fuel on hillsides			
Piresmart Community Information Sessions Developed prescriptions for fuel management Q 69 Climate Change Adaptation Actions Proposed for 2019			
Developed prescriptions for fuel management Q 69 Climate Change Adaptation Actions Proposed for 2019			
Q 69 Climate Change Adaptation Actions Proposed for 2019			
Use of goats to reduce fuel on hillsides	Q 69 Climate Change Adaptation Actions Proposed for 2019		
Firesmart Community Education			
Flood Mitigation workshops and planning			
Q 70 For more information please contact			



Q 71. The following are key resources that may be helpful to your local government in identifying climate impacts, as			
well as, strategies, actions and funding to deal with them. For those resources that you have used, please indicate whether they were useful in advancing your work in climate change adaptation?			
Indicators of Climate Change for British Columbia	Haven't Used		
<u>Plan2Adapt</u>	Haven't Used		
Province of BC's BC Adapts Video Series	Haven't Used		
Preparing for Climate Change: Implementation Guide for Local Governments	Haven't Used		
Public Infrastructure and Engineering Vulnerability Committee's (PIEVC)	Haven't Used		
Sea Level Rise Adaptation Primer	Haven't Used		
BC Regional Adaptation Collaborative Webinars	Haven't Used		
Retooling for Climate Change	Haven't Used		
Water Balance Model	Haven't Used		
Water Conservation Calculator	Haven't Used		
Funding:			
National Disaster Mitigation Program (NDMP)	Haven't Used		
Community Emergency Preparedness Fund (CEPF)	Useful		
Municipalities for Climate Innovation Program (MCIP)	Haven't Used		
Climate Adaptation Partner Grants (FCM)	Haven't Used		
Infrastructure Planning Grants (MAH)	Useful		
Federal Gas Tax Fund	Useful		
Other (please specify)			

2018 OTHER CLIMATE ACTIONS

Other Climate Actions

This section provides local governments the opportunity to report other climate actions that are not captured in the categories above.

Q7	Q 72 Community-Wide Other Actions Taken in 2018			
Q7	73 Corporate Other Actions Taken in 2018			

Other	
Q 74 Are you familiar with the Community Lifecycle Infrastructure Costing Tool (CLIC)?	Yes



Q 75 Is your local government using the <u>CLIC</u> tool?	No

INNOVATION AND PEER-TO-PEER LEARNING

Innovation

This section provides the opportunity to showcase an innovative *Corporate and/or Community-Wide* GHG reduction and/or climate change adaptation activity that your local government has undertaken and that has had, or has the potential to have, a significant impact. You are welcome to highlight an action that has already been listed.

Projects included here may be featured as success stories on the <u>B.C. Climate Action Toolkit</u> and/or shared with other local governments to inspire further climate action. Please add links to additional information where possible.

Communities that have conducted innovative initiatives may want to consider making applications to CEA's Climate and Energy Action Awards, FCM Sustainable Communities Awards or to FCM's National Measures Report.

Q 76 Community-Wide Innovation Action
Q 77 Corporate Innovation Action
Q 78 For more information on actions described above contact
Q 70 FOI MOTE INFORMACION ON ACCIONS ACSCRIBED ABOVE CONTACT

Programs, Partnerships and Funding Opportunities

Local governments often rely on programs, partnerships and funding opportunities to achieve their climate action goals. Please share the names of programs and organizations that have supported your local government's climate actions by listing each entry in the box below separated by a forward slash (e.g. program1/program2).

Mitigation

Q 79 Mitigation Programs, Partnerships and Funding



Adaptation		
, tack tation		

2018 CARBON NEUTRAL REPORTING

Q 80 Adaptation Programs, Partnerships and Funding

Local governments are required to report on their progress in achieving their carbon neutral goal under the <u>B.C. Climate Action Charter</u>. Working with B.C. local governments, the joint Provincial-UBCM Green Communities Committee (GCC) has established a common approach to determining carbon neutrality for the purposes of the Climate Action Charter, including a Carbon Neutral Framework and supporting guidance for local governments on how to become carbon neutral.

Prior to completing this portion of the survey, please ensure that you are familiar with guidance available on the <u>B.C. Climate Action Toolkit website</u>, especially the <u>Workbook</u> and <u>Becoming Carbon</u> Neutral: A Guide for Local Governments in British Columbia.

Please note: As a result of the BC Recycling Regulation, local governments are no longer required to account for GHG emissions from vehicles, equipment and machinery required for the collection, transportation and diversion of packaging and printed paper, in their annual Climate Action Revenue Incentive Program (CARIP) reports.

Reporting Emissions

Q 81 Did your local government measure corporate GHG emissions for 2018?	Ye	es
Q 82 If your local government measured 2018 corporate GHG emissions, please report the number of corporate GHG emissions from services delivered directly by your local government (in tonnes of carbon dioxide equivalent)	1,072	
Q 83 If your local government measured 2018 corporate GHG emissions, please report the number of corporate GHG emissions from contracted services (in tonnes of carbon dioxide equivalent)		
Q 84 TOTAL A: CORPORATE GHG EMISSIONS FOR 2018 (Direct GHGs + Contracted	1,072	tCO2e



GHGs)	

Reporting Reductions and Offsets

To be carbon neutral, a local government must balance their TOTAL corporate GHG emissions generated in 2018 by one or a combination of the following actions:

- undertake GCC-supported Option 1 Project(s)
- undertake GCC-supported Option 2 Project(s)
- purchase carbon offsets from a credible offset provider

For more information about options to balance or offset corporate GHG emissions please refer to Becoming Carbon Neutral: A Guidebook for Local Governments in British Columbia.

If applicable, please report the 2018 GHG emissions reductions (in tonnes of carbon dioxide equivalent (tCO2e)) being claimed from any of the following Option 1 GHG Reduction Projects:

OPTION 1 PROJECTS	REDUCTIONS
Q 85 Energy Efficient Retrofits (in tonnes of carbon dioxide equivalent (tCO2e))	
Q 86 Solar Thermal (in tonnes of carbon dioxide equivalent (tCO2e))	
Q 87 Household Organic Waste Composting (in tonnes of carbon dioxide equivalent (tCO2e))	
Q 88 Low Emission Vehicles (in tonnes of carbon dioxide equivalent (tCO2e))	
Q 89 Avoided Forest Conversion (in tonnes of carbon dioxide equivalent (tCO2e))	
Q 90 TOTAL B: REDUCTIONS FROM ALL OPTION 1 PROJECTS FOR 2018	tCO2e

Q 91 If applicable, please report the names and 2018 GHG emissions reductions (in tonnes of carbon dioxide equivalent (tCO2e)) being claimed from Option 2 GHG Reduction Projects:

Option 2 Project Name	REDUCTIONS
Option 2 GHGs Reduced (tCO2e)	
Option 2 Project Name	
Option 2 GHGs Reduced (tCO2e)	



Option 2 Project Name	
Option 2 GHGs Reduced (tCO2e)	
Q 92 TOTAL C: REDUCTIONS FROM ALL OPTION 2 PROJECTS FOR 2018	tCO2e

Offsets

Q 93 If applicable, please report the name of the offset provider, type of project and number of offsets purchased (in tonnes of carbon dioxide equivalent (tCO2e)) from an offset provider for the 2018 reporting year:

NOTE: DO NOT INCLUDE ANY FUNDS THAT MAY BE SET ASIDE IN A CLIMATE ACTION RESERVE FUND.

Offset Provider Name	OFFSETS	
Offsets (tCO2e)		
Offset Provider Name		
Offsets (tCO2e)		
Q 94 TOTAL D: OFFSETS PURCHASED FOR 2018	tCO2e	

O 9!	5 TOTAL	REDUCTIONS	AND OFFSETS	FOR 2018	(Total B+C+D) = tCC)2e

Corporate GHG Emissions Balance for 2018

Your local government's Corporate GHG Emissions Balance is the difference between total corporate offsetable GHG emissions (direct + contracted emissions) and the GHG emissions reduced through GCC Option 1 and Option 2 projects and/or the purchase of offsets.

Q 96 CORPORATE GHG EMISSIONS BALANCE FOR 2018 = (A – (B+C+D)) = ___1,072_______tCO2e

If your Corporate GHG Emissions Balance is negative or zero, your local government is carbon neutral.



CONGRATULATIONS!

Q 97 If your local government was carbon neutral in 2018, please record any emissions reductions you will be carrying over for future years and the source of the reductions, including the year they were earned (e.g. organics diversion, 2018 100 tCO2e)

SOURCE OF CARRY OVER EMISSION REDUCTIONS (and year earned)	REDUCTIONS
Q 98 BALANCE OF REDUCTIONS ELIGIBLE FOR CARRY OVER TO NEXT YEAR	tCO2e

Carbon Neutral Reporting	
Q 99 Does your local government set aside funds in a climate reserve fund or similar?	No

GCC CLIMATE ACTION RECOGNITION PROGRAM

Green Communities Committee Climate Action Recognition Program

The joint Provincial-UBCM Green Communities Committee (GCC) is pleased to be continuing the Climate Action Recognition Program again this year. This multi-level program provides the GCC with an opportunity to review and publicly recognize the progress and achievements of each Climate Action Charter (Charter) signatory.

Recognition is provided on an annual basis to local governments who demonstrate progress on their Charter commitments, according to the following:

- **Level 1 Demonstrating Progress on Charter Commitments**: For local governments who demonstrate progress on fulfilling one or more of their Charter commitments.
- **Level 2 Measuring GHG Emissions**: For local governments that achieve Level 1, and who have measured their Corporate GHG Emissions for the reporting year and demonstrate that they are familiar with their community's energy and emissions inventory (i.e. CEEI)
- **Level 3 Accelerating Progress on Charter Commitments:** For those local governments who have achieved Level 1 and 2 and have demonstrated undertaking significant action (corporately



or community wide) to reduce GHG emissions in the reporting year (e.g. through undertaking a GHG reduction project, purchasing offsets, establishing a reserve fund).

Level 4 - Achievement of Carbon Neutrality: For local governments who achieve carbon neutrality in the reporting year.

Q 100 Based on your local government's 2018 CARIP Climate Action/Carbon Neutral Progress Survey, please check the GCC Climate Action Recognition Program level that best applies:

Level 1 – Demonstrating Progress on Charter Commitments	
Level 2 – Measuring GHG Emissions	X
Level 3 – Accelerating Progress on Charter Commitments	
Level 4 - Achievement of Carbon Neutrality	
Not Sure	

Q 101 Related to Level 3 recognition, if applicable, please identify any new or ongoing corporate or community wide GHG reduction projects (other than an Option 1 or Option 2 project) undertaken by your local government that reflects a significant investment of time and/or financial resources and is intended to result in significant GHG reductions:

PROJECT NAME:	